

Earthquake Information For the World

An essential role of the Federal Government is to minimize loss of life and property that results from natural disasters such as earthquakes. The U.S. Geological Survey, through its National Earthquake Information Center, helps fulfill this responsibility.

Since 1973, the U.S. Geological Survey (USGS) has provided up-to-date earthquake information to scientists, government agencies, universities, private companies, and the general public. This information includes determinations of the locations and severity of seismic events in the United States and throughout the world, including the rapid analysis of significant earthquakes on a 24-hour basis. Seismologists around the world use this information to increase their understanding of earthquakes and to better evaluate earthquake hazards.

The USGS National Earthquake Information Center (NEIC) in Golden, Colorado, operates a 24-hour-a-day Earthquake Early Alerting Service. This service rapidly and accurately determines the location and magnitude of significant earthquakes throughout the world.

The NEIC immediately sends this information to key civil defense and public safety agencies, including railroads, powerplants, and

pipeline companies, and Federal and State emergency service agencies. The information also goes to National and international news media, to scientific agencies (including groups involved in aftershock studies), and to private citizens who request information. The facts about a damaging earthquake abroad are also relayed to staffs of the American Embassies and consulates in the affected countries, and to the United Nations Department of Humanitarian Affairs in Geneva, Switzerland.

The NEIC issues rapid reports for earthquakes of magnitude 4.5

or greater in the United States, 6.5 or greater anywhere in the world, and other earthquakes of lesser magnitude that are potentially damaging. The NEIC relies on the cooperation of many seismic-reporting networks throughout the world to gather data. More than 3,000 seismic stations report data to the NEIC.

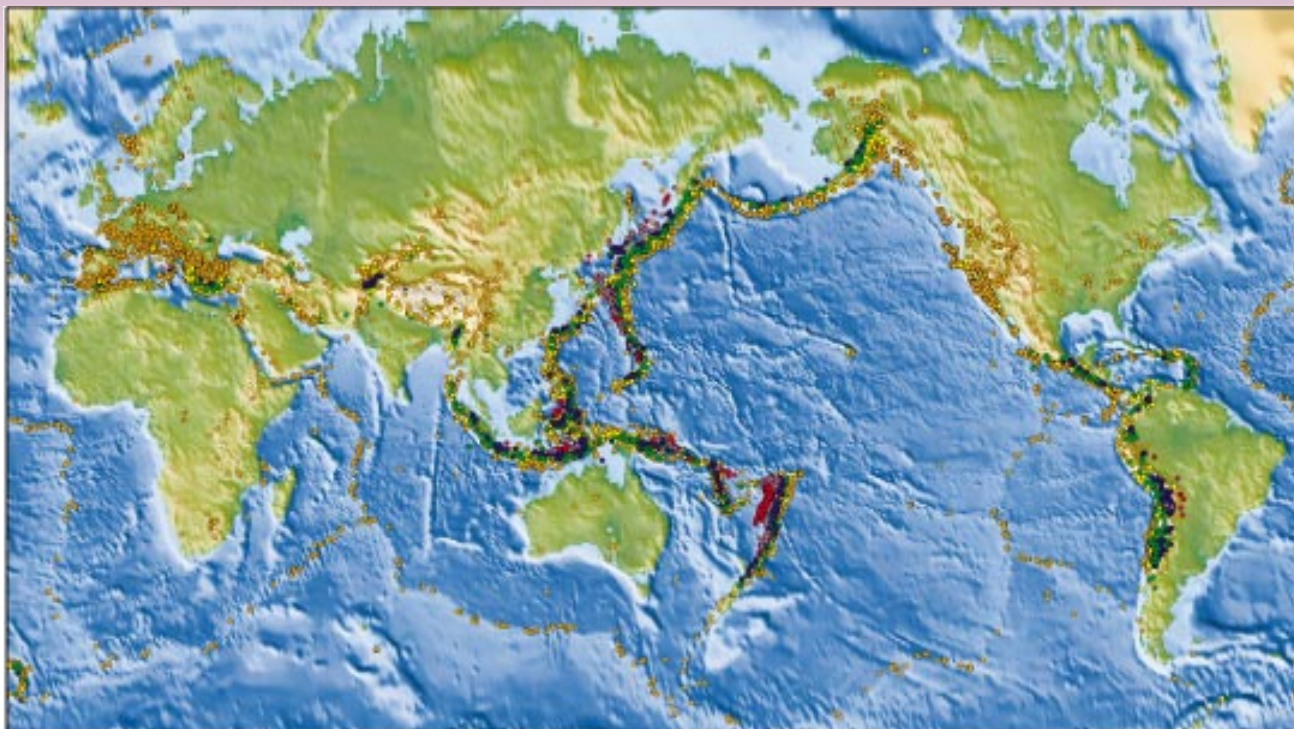
Of the many millions of earthquakes estimated to occur each year, the NEIC staff presently locates and publishes information for approximately 20,000 events. The NEIC and its cooperators have located more than a quarter million earthquakes since 1973.



The NEIC is open to the public and provides daily tours to both individuals and groups.



At the facility in Golden, Colorado, USGS/NEIC spokesman Waverly Person explains earthquakes to the media, students, and other visitors from around the world.



Worldwide seismicity map for 1995 showing about 17,000 earthquakes of magnitude 3.0 and greater.

NEIC Products and Services

•**Quick Epicenter**

Determinations: Updated daily, this is a preliminary list of earthquakes available for computer access by modem and over the Internet. This list includes about 350 events.

•**Preliminary Determination of Epicenters:** Published and distributed weekly to those contributing data to the NEIC; includes about 850 events each month. A Monthly Listing version is also available to the general public on a subscription basis through the Superintendent of Documents in Washington, D.C.

•**Earthquake Data Report:** Published electronically on the World Wide Web. This provides detailed information on about 1,600 events each month. Information is intended for use by seismologists who provide data to the NEIC.

•**State, national, and global seismicity maps:**

Earthquake data are also made available on CD-ROM's.

•**Earthquake Information Line:** (303-273-8516) Offers, on a 24-hour basis, a recorded message about earthquakes throughout the world with magnitudes 5.5 or greater, and earthquakes that are felt and (or) cause damage in the United States. The line is updated twice daily or whenever a significant earthquake occurs.

Through the NEIC, the USGS continues to develop new technologies to monitor, analyze, communicate, and respond to earthquake hazards. In this role, the USGS/NEIC during the past quarter century has become the global leader in providing timely, reliable earthquake information to the citizens of the United States and to people with interest in earthquakes throughout the world.

Cooperators

The USGS/NEIC cooperates with institutions and observatories in about 80 countries.

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